

## CLAIMS

- Sub B1 1. A nucleic acid molecule comprising:
- a first nucleic acid sequence comprising an aptamer covalently linked to a second nucleic acid sequence comprising a biological effector sequence.
2. A nucleic acid molecule comprising:
- a first nucleic acid sequence comprising an aptamer linked via Watson-Crick base pairing to a second nucleic acid sequence comprising a biological effector sequence.
3. The molecule of claim 1 or 2, further comprising a third nucleic acid sequence which is an aptamer that is covalently linked to said nucleic acid molecule.
4. The molecule of claim 1 or 2, further comprising a third nucleic acid sequence which is an aptamer that is linked via Watson-Crick base pairing to said nucleic acid molecule.
5. The molecule of claim 3 wherein said third nucleic acid sequence comprises an aptamer that is different from said first nucleic acid comprising an aptamer.
6. The molecule of claim 4 wherein said third nucleic acid sequence comprises an aptamer that is different from said first nucleic acid sequence comprises an aptamer.
7. The molecule of claim 1 or 2, comprising DNA and RNA.
8. The molecule of claim 1 or 2, wherein said biological effector sequence encodes a polypeptide or polynucleotide.
9. The molecule of claim 1 or 2, wherein said biological effector sequence comprises a messenger RNA.

10. The molecule of claim 8, wherein the coding sequence of said biological effector sequence comprises double-stranded DNA, and wherein said biological effector sequence comprises a promoter.

11. The molecule of claim 1 or 2, wherein said biological effector sequence comprises an antisense sequence.

12. The molecule of claim 1 or 2, wherein said biological effector sequence comprises a nucleic acid enzyme.

13. A nucleic acid molecule comprising a template for the assembly of the molecule of claim 1.

14. A cloning vector comprising the molecule of claim 1.

15. A cloning vector comprising the molecule of claim 11.

16. A composition comprising the molecule of claim 1 or 2 and a biologically acceptable carrier.

17. A composition comprising an admixture of a molecule of claim 1 or 2 and a cell that bears a target molecule for said aptamer.

18. A cell transfected with a nucleic acid molecule, wherein the nucleic acid molecule is chosen from the group: a molecule of claim 1 or 2, a molecule of claim 13, a vector of claim 14, and a vector of claim 15.

*SW*  
*BA*  
~~19. A method of introducing a biological effector sequence into a cell comprising contacting the molecule of claim 1 or 2 with a host cell.~~

~~20. A method of introducing a biological effector sequence into a cell using the molecule of claim 1 or 2, comprising administering said molecule to an organism.~~

~~21. The method of claim 20, which comprises administering to an organism a composition of claim 16.~~

introducing a biological effector sequence into a cell by contacting the molecule of claim 1 or 2 with a host cell, and administering said cell to an organism.